

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte DAVID I. SCHEER

---

Appeal No. 94-0962  
Application No. 07/776,895<sup>1</sup>

---

ON BRIEF

---

Before KIMLIN, WEIFFENBACH and PAK, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's refusal to allow claim 27, which is the only claim remaining in the application.

The subject matter on appeal is directed to treating cytomegalovirus infections in humans with 2-deoxyguanosine.

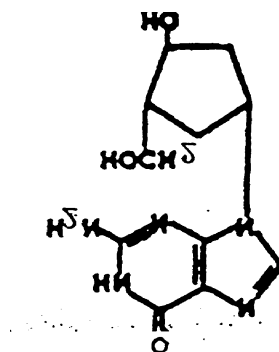
---

<sup>1</sup> Application for patent filed October 16, 1991. According to the applicant, the application is a continuation of Application No. 07/489,458, filed March 6, 1990, now abandoned.

Appeal No. 94-0962  
Application No. 07/776,895

This appealed subject matter is illustrated in claim 1 which reads as follows:

27. A method  
cytomegalovirus  
characterized by  
human an antiviral  
compound of the



for preventing or treating  
infections in humans  
administering to said  
effective amount of a  
formula

The references relied on by the examiner are:

Shealy et al. (Shealy)	4,543,255	Sep. 24,
1985 Borthwick et al. (Borthwick)	4,857,531	
Aug. 15, 1989 <sup>2</sup>		
Vince et al. (Vince '224)	4,916,224	Apr. 10,
1990		
Vince et al. (Vince '559)	4,931,559	Jun. 05,
1990		

---

<sup>2</sup> The examiner does not rely on this reference in the statement of rejection in the final Office action or in the Answer.

Appeal No. 94-0962  
Application No. 07/776,895

Vince et al. (Vince '758) 4,950,758 Aug. 21,  
1990

The references relied on by appellant are:

Virology, Raven Press, Fields et al., pp. 498, 499, 503,  
508, 509, 580, 630, 650 and 651 (1985)

American Journal of Ophthalmology, Rosecan, Vol. 101, No.  
4, pp. 405-418 (1986)

Antimicrobial Agents and Chemotherapy, "Comparison of  
Susceptibilities of Varicella-Zoster Virus and Herpes Simplex  
Viruses to Nucleoside Analogs," Machida, Vol. 29, No. 3,  
pp. 524-526 (1986)

Appeal No. 94-0962  
Application No. 07/776,895

Antimicrobial Agents and Chemotherapy, "Antiherpes Virus Activity of 9-(4-Hydroxy-3-Hydroxy-Methylbut-1-yl)Guanine(BRL 39123) in Cell Culture," Boyd et al., Vol. 31, No. 8, pp. 1238-1242 (1987)

Verh. K. Acad. Geneesk., Belgium, "Towards a Selective Chemotherapy of Virus Infections, Development of Bromovinyldeoxyuridine as a Highly Potent and Selective Antiherpetic Drug," DeClerq, Vol. 50, page 264, Figure 1 (1988)

Antimicrobial Agents: The Development and Assessment of Antiviral Chemotherapy, CRC Press, Inc., Fields, Vol. 1, page 10 (1988)

The appealed claim stands rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Shealy, Vince '758, Vince '559 and Vince '224.

We have carefully reviewed the entire record before us, including each and every argument advanced by both the examiner and appellant in support of their respective positions. This review leads us to conclude that the examiner's § 103 rejection is not well-founded. We will not sustain the examiner's rejections for essentially those reasons set forth in the Brief and the Reply Brief. We add the following primarily for emphasis.

The examiner's rejection is predicated on the contention that it would have been obvious to employ 2-deoxyguanosine

described by Shealy for the treatment of herpes simplex viruses types 1 and 2 for the treatment of cytomegalovirus infections in humans. To support this contention, the examiner relies on Vince '224<sup>3</sup>. However, Vince '224 points to the unpredictable nature of behaviors of structurally similar compounds in the context of treating different herpes viruses (see column 1, line 64 to column 2, line 2 and column 2, lines 41-44) and describes a broad generic formula which embrace a myriad of compounds, without including 2-deoxyguanosine. The references and the expert opinion declarations relied on by appellant also establish that mechanisms for treating herpes simplex viruses types 1 and 2 are materially different from that of cytomegalovirus. Due to this difference, the experts conclude that a person having ordinary skill in the art would not look to compounds useful for treating herpes simplex viruses types 1 and 2 for the treatment of cytomegalovirus infections. Under these circumstances, we agree with appellant that the prior art references as a whole not only would not have suggested to one

---

<sup>3</sup> The disclosures of Vince '758 and Vince '559 are substantially identical to that of Vince '224.

Appeal No. 94-0962  
Application No. 07/776,895

of ordinary skill in the art to administer 2-deoxyguanosine for the treatment of cytomegalovirus, but would not have provided a reasonable expectation of success to one of ordinary skill in the art that 2-deoxyguanosine would

Appeal No. 94-0962  
Application No. 07/776,895

be useful for treating cytomegalovirus infections.  
Accordingly, we reverse the examiner's decision to reject  
claim 27 under  
35 U.S.C. § 103.

The decision of the examiner is reversed.

REVERSED

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
CAMERON WEIFFENBACH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
CHUNG K. PAK	)	
Administrative Patent Judge	)	

Appeal No. 94-0962  
Application No. 07/776,895

John W. Freeman  
Fish & Richardson  
225 Franklin Street, Suite 3100  
Boston, MA 02110-2804



Appeal No. 94-0962  
Application No. 07/776,895

CKP/jrg

APPEAL NO. 94-0962 - JUDGE PAK  
APPLICATION NO. 07/776,895

APJ PAK

APJ WEIFFENBACH

APJ KIMLIN

DECISION: **REVERSED**

Typed By: Jenine Gillis

**DRAFT TYPED:** 17 Jul 00

**FINAL TYPED:**